

STANFORD UNIVERSITY
MEDICAL CENTER
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DEPARTMENT OF GENETICS
School of Medicine

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DAVENPORT 1-1200
Cables STANMED

Dr. Edward Anders
Associate Professor of Chemistry
The University of Chicago
The Enrico Fermi Institute for
Nuclear Studies
Chicago 37, Illinois

Dear Doctor Anders:

Thank you for your manuscript on "The Moon as a Collector of Biological Material." I was glad to see that you have made the necessary quantitative calculations and, without having checked them, I am still sure that they are quite correct. The only remark I can make is that I have never disagreed with your conclusion and I fear that in your very first sentence you are misquoting me. I am enclosing a reprint of the paper you cited, marked for the relevant phrase, which makes it quite clear that I was thinking of the moon as a possible repository of microorganisms of terrestrial, not of extra-solar, origin. In fact, the main point of a search for microorganisms on the moon is to test the implication that the moon has been periodically contaminated from the earth. I agree with you that the chances of finding traces of extra-solar origin are too low to be worth considering. However, if it is true that terrestrial material can be found in detectable amounts on the moon, then your last paragraph would be substantiated.

Since your paper does create a false impression of disagreement that would be hard to dislodge, I would urge you to make the appropriate revision. This would be much more satisfactory than polemic at cross-purposes.

The one further point that we might bring into friendly argument is the reasoning of the penultimate paragraph of your paper. You seem to be arguing for a mitigation of sterilization of lunar vehicles because the moon may have already been contaminated since 1908. I would rejoin that it is precisely to test such possibilities that we must keep the field aseptic for further exploration. It is rather paradoxical that the arguments against vehicle sterilization have come, on the one hand, from people who insist that the moon could never have been a repository, and from the other, from those who suggest that it must have been.

Yours cordially,

Joshua Lederberg
Professor of Genetics

cc: Dr. Graham DuShane, Science

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